

CLAIMS

1. A strip-form silicon carbide furnace heating element.
- 5 2. A furnace heating element as claimed in Claim 1, in which the element is non-hollow.
3. A furnace heating element as claimed in Claim 1 or Claim 2, in which the cross sectional aspect ratio is greater than 3:1.
4. A furnace heating element as claimed in Claim 3, in which the cross sectional  
10 aspect ratio is greater than 5:1.
5. A furnace heating element as claimed in Claim 4, in which the cross sectional aspect ratio is greater than 10:1.
6. A furnace heating element as claimed in any one of Claims 1 to 5, in which the element comprises non-strip form cold ends.
- 15 7. A furnace heating element as claimed in any one of Claims 1 to 5, in which portions of the strip have a lowered resistivity and form cold ends.
8. A furnace heating element as claimed in any one of Claims 1 to 7, in which the strip is bent out of the plane of the strip.
9. A furnace heating element as claimed in any one of Claims 1 to 8, in which  
20 the strip form element is generally U-shaped.
10. A furnace heating element as claimed in any one of Claims 1 to 9, in which the strip is curved in cross-section in at least part of its length.
11. A furnace heating element as claimed in any one of Claims 1 to 10, in which  
25 the heating section comprises a recrystallised self-bonded silicon carbide material

12. A furnace heating element as claimed in any one of Claims 1 to 10, in which the heating element comprises reaction bonded or reaction sintered silicon carbide.
13. A method of making a furnace heating element as claimed in any one of  
5 Claims 1 to 12, in which a strip preform is made by extrusion, and is bent to shape after extrusion.
14. A method as claimed in Claim 13, in which cold ends are made separately to the heating section, and later joined to it.
15. A method as claimed in Claim 13, in which cold ends are formed integrally  
10 with the element.
16. A method as claimed in any one of Claims 13 to 15, in which the heating section is recrystallised, to form a self-bonded silicon carbide material.
17. A method as claimed in any one of Claims 13 to 15, in which the material of  
15 the extruded preform is such that the final product will comprise reaction bonded or reaction sintered silicon carbide.